

Duke Energy Carolinas, LLC's and Duke Energy Progress, LLC's First Set of Requests for Production of Documents and Interrogatories to Natural Resources Defense Council, Southern Alliance for Clean Energy, Sierra Club, South Carolina Coastal Conservation League and Upstate Forever

Interrogatory:

1-1. "Emerging technologies" are referenced on pages 4, 5, and 15 of Jim Grevatt's direct testimony, and on pages 5-6 of Exhibit A to Mr. Grevatt's direct testimony. Please provide the following as related to these "emerging technologies":

b. Names and detailed descriptions of emerging technologies you have identified.

Response:

b. CCL, et al object to this interrogatory because Mr. Grevatt did not identify specific emerging technologies in his testimony and providing "detailed descriptions" would require Mr. Grevatt to perform new and additional analysis. Notwithstanding that objection, there are many emerging technology resources and databases that could have been used as a reference when preparing the MPS. Examples include the California Emerging Technologies Coordinating Council (https://www.etcc-ca.com/reports/search?field_project_status=All), ARPA-E (<https://arpa-e.energy.gov/technologies/projects>), the U.S. Department of Energy High Impact Technologies (<https://www.energy.gov/eere/buildings/high-impact-technology-deployment-pathways>), and the Minnesota Commerce Department Emerging Energy Efficiency Technologies (<https://mn.gov/commerce-stat/pdfs/card-leveraging-public-research.pdf>).

Duke Energy Carolinas, LLC's and Duke Energy Progress, LLC's First Set of Requests for Production of Documents and Interrogatories to Natural Resources Defense Council, Southern Alliance for Clean Energy, Sierra Club, South Carolina Coastal Conservation League and Upstate Forever

Interrogatory:

- 1-4. Page 7 of Exhibit A to Mr. Grevatt's direct testimony lists nineteen measures that Mr. Grevatt asserts were omitted from Nexant's Market Potential Study. Please provide the following as related to these measures:
- b. A list of utilities and jurisdictions that use each of these programs.

Response (highlighted added):

b. CCL, et al object to this interrogatory because it erroneously states that Mr. Grevatt's testimony refers to "programs" when the cited testimony refers to "measures." Further, CCL, et al. object to this interrogatory as overbroad, unduly burdensome and because the information sought is equally available to Duke Energy. Notwithstanding said objection, assuming the question was intended to refer to measures, the following table provides a sampling of TRM resources that include the measures identified on Page 7 of Exhibit A. Measures that are not included in the selected TRM resources include references to custom programs. This list of TRMs and custom programs is used to illustrate a sampling of programs and jurisdictions that include the measures in question and should not be considered an exhaustive and complete list.

	Illinois TRM v9	Michigan MEMD 2021	Mid-Atlantic TRM v9	Custom Program References
Residential				
LED decorative and directional lamps: Screw- and pin-based LED lamps	✓	✓	✓	
Pool covers	✓			
CEE tier 2 refrigerators	✓		✓	
Commercial				
Networked lighting controls	✓	✓	✓	
LED parking lot lighting	✓	✓	✓	
LED directional lamps	✓	✓	✓	
Evaporator fan motor controls	✓	✓	✓	
Variable refrigerant flow (VRF)			✓	
Dedicated outdoor air system (DOAS)	✓			
Air-source heat pumps	✓	✓	✓	
Variable speed air compressor	✓	✓	✓	
Dual enthalpy economizer for existing buildings			✓	
Data center hot/cold aisle configuration		✓		
Industrial				
Strategic energy management				https://library.cee1.org/system/files/library/13619/CEE_2017SEMPProgramSummary.pdf
Process improvement				https://library.cee1.org/system/files/library/13619/CEE_2017SEMPProgramSummary.pdf
Compressed air leak survey & repair				Examples include Xcel Energy Minnesota and Efficiency Vermont
Compressed air no-loss drains	✓	✓		
Chiller plant optimization				Examples include New Jersey Clean Energy Program and PECO
Advanced rooftop control	✓			

Duke Energy Carolinas, LLC's and Duke Energy Progress, LLC's First Set of Requests for Production of Documents and Interrogatories to Natural Resources Defense Council, Southern Alliance for Clean Energy, Sierra Club, South Carolina Coastal Conservation League and Upstate Forever

Interrogatory:

- 1-25. For how long, or since what year, has each of the following organizations, or a representative of the organization (e.g., the Southern Environmental Law Center) been aware of or participated in the Duke Companies' EE Collaborative?
- a. Southern Alliance for Clean Energy
 - b. S.C. Coastal Conservation League
 - c. Upstate Forever
 - d. Sierra Club
 - e. Natural Resources Defense Council

Response:

- a. Southern Alliance for Clean Energy: On information and belief, a representative of SACE has participated in the Duke Companies' EE Collaborative (or in one or both of its predecessors, when DEC and DEP operated separate collaboratives) since approximately 2010.
- b. S.C. Coastal Conservation League: On information and belief, a representative of CCL has participated in the Duke Companies' EE Collaborative (or in one or both of its predecessors, when DEC and DEP operated separate collaboratives) since approximately 2010.
- c. Upstate Forever: On information and belief, a representative of Upstate Forever has participated in the Duke Companies' EE Collaborative (or in one or both of its predecessors, when DEC and DEP operated separate collaboratives) since 2019.
- d. Sierra Club: On information and belief, no representative of the Sierra Club has participated in the Duke Companies' EE Collaborative (or in either of its predecessors, when DEC and DEP operated separate collaboratives).
- e. Natural Resources Defense Council: On information and belief, a representative of NRDC has participated in the Duke Companies' EE

Collaborative (or in one or both of its predecessors, when DEC and
DEP operated separate collaboratives) since approximately 2010.